

# List of Activities

## P Ceanothus americanus (Rhamnaceae)

### How used

Medicinal

\*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Activity	Reference
Anthelmintic	
	<b>Chemicals (1)</b>
	BETULINIC-ACID
Antibacterial	
	<b>Chemicals (1)</b>
	BETULINIC-ACID
Anticancer	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
	<b>Chemicals (1)</b>
	BETULINIC-ACID
Anticarcinomic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
	<b>Chemicals (2)</b>
	BETULIN
	BETULINIC-ACID
Antiedemic	
	<b>Chemicals (1)</b>
	BETULINIC-ACID
Antifeedant	
	<b>Chemicals (1)</b>
	BETULIN
Antiflu	
	<b>Chemicals (1)</b>
	BETULIN
AntiHIV	
	<b>Chemicals (2)</b>
	BETULIN 6.1 uM
	BETULINIC-ACID EC50=2.0 ug/ml
Antiinflammatory	Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.
	<b>Chemicals (2)</b>
	BETULIN
	BETULINIC-ACID
Antileukemic	

**Chemicals (1)**

BETULINIC-ACID

Antimalarial

**Chemicals (1)**BETULINIC-ACID IC<sub>50</sub>=19-26 ug/ml

Antimelanomic      New York Times, 3/28/95.

**Chemicals (1)**

BETULINIC-ACID

Antinociceptive

**Chemicals (1)**

BETULINIC-ACID

Antiplasmoidal

**Chemicals (1)**BETULINIC-ACID IC<sub>50</sub>=19-26 ug/ml

Antitumor      Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor &amp; Frost, London. 791 pp.

**Chemicals (2)**

BETULIN

BETULINIC-ACID

Antiviral

**Chemicals (2)**

BETULIN 6.1 uM

BETULINIC-ACID 14.8 uM

Aphidifuge      Lugemwa, F.N., Huang, F-Y., Bentley, M.D., Mendel, M.J., and Alford, A.R. 1990. A Heliothis zea Antifeedant from the Abundant Birchbark Triterpene Betulin. J. Agric. Food Chem. 38(2): 493-494.

**Chemicals (1)**

BETULIN

Apoptotic

**Chemicals (1)**

BETULINIC-ACID

Cytotoxic

**Chemicals (2)**

BETULIN 600 ppm

BETULINIC-ACID 50-100 ppm

Hypolipemic

**Chemicals (1)**

BETULIN

Phospholipase-A2-Inhibitor

**Chemicals (1)**

BETULINIC-ACID

Prostaglandin-Synthesis-Inhibitor      Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from Menyanthes trifoliata L. Yao Hsueh Hsueh Pao, 30(8): 621-626.

## Chemicals (2)

BETULIN IC<sub>50</sub>=119 uM

BETULINIC-ACID 200 ug/ml

Topoisomerase-II-Inhibitor

## Chemicals (1)

BETULIN IC<sub>50</sub>=38.6 uM